LUMINARY Level 4 Note #24

From: D. Lickly

Date: 7 October 1968

Level 4 people will have questions about specific programs and routines included in their tests. The people who are responsible for the AGC programs and routines are listed below:

Programs

P12	Larry Berman
P06	Dana DeWolf
P20	Peter Volante, Virginia Dunbar
P21	Ted Crocker
P22	Peter Volante, Virginia Dunbar
P25	Peter Volante, Jack Connor
P27	Paul Fagin
P30	Peter Adler
P31	Pat White
P32	Pat White
P33	Pat White
P34	Pat White
P35	Pat White
P38	Jane Goode
P39	Jane Goode
P40	Peter Adler
P41	Peter Adler
P42	Peter Adler
P47	Bob Covelli
P51	Don Millard
P52	Don Millard
P57	Don Millard
P63-P67	Don Eyles
P70	Walter Bernikowich
P71	Walter Bernikowich
P72	Pat White
P73	Pat White
P74	Pat White
P75	Pat White
P76	Ted Crocker
P78	Jane Goode
P79	Jane Goode

Routines

R03	Peter Weissman
R04	Jim Kernan
R05	Peter Volante
R10	Walter Bernikowich
R11	Walter Bernikowich
R12	Bob Covelli
R13	Don Eyles
R21-R25	Peter Volante
R29	Peter Volante
R30	Frank Gauntt
R31	Ted Crocker
R36	Ted Crocker
R47	Jim Kernan, Phyllis Rye
R50-R55	Don Millard
R59	Don Millard
R60	Frank Gauntt
R61/R65	Virginia Dunbar, Jack Connor
R62	Frank Gauntt
R63	Frank Gauntt
R00	Dana DeWolf
R02	Dana DeWolf
R33	George Cox
R77	Jim Kernan

Miscellaneous Areas

Pinball	John Vella, Marjorie Besas
Display Interface	Margaret Hamilton, Phyllis Rye
Restarts, Fresh Start & other Service areas	Phyllis Rye, Dana DeWolf
Integration	Bill Ostanek

Those responsible for the environment programs and routines are:

Programs

P00	Keith Glick
P06	Bob Wadsworth, Izzy Beilen
P12	Herb Chasan
P20	Eric Korngold
P21	Eric Korngold
P22	Eric Korngold
P25	Keith Glick, Eric Korngold
P27	Lance Drane
P30	Herb Chasan
P31	Herb Chasan
P32	Herb Chasan
P33	Herb Chasan
P34	Herb Chasan
P35	Herb Chasan
P38	Herb Chasan
P39	Herb Chasan
P40	Herb Chasan

P41	Herb Chasan
P42	Herb Chasan
P47	Herb Chasan
P51	Bob Wadsworth, Lance Drane
P52	Bob Wadsworth, Lance Drane
P57	Bob Wadsworth, Lance Drane
P63-P68	Herb Chasan
P70-P75	Herb Chasan
P78	Herb Chasan
P79	Herb Chasan

Routines

R00	Lance Drane
R02	Bob Wadsworth
R03	Lance Drane
R04	Keith Glick
R05	Keith Glick
R10-R14	Herb Chasan
R21-R25	Eric Korngold
R29	Eric Korngold
R30	Lance Drane
R31	Keith Glick, Lance Drane
R32	Keith Glick
R33	Lance Drane
R36	Keith Glick, Lance Drane
R40	Herb Chasan
R41	Keith Glick
R47	Keith Glick
R50-R55	Lance Drane, Bob Wadsworth
R59	Lance Drane, Bob Wadsworth
R60	Herb Chasan
R61	Herb Chasan, Lance Drane
R62	Herb Chasan
R63	Herb Chasan
R65	Herb Chasan
R77	Eric Korngold

LUMINARY LEVEL 4 TEST DESCRIPTION & PERSONNEL ASSIGNMENTS

TASK	DESCRIPTION & SEQUENCE	RESPONSIBLE ENGINEER
L4.1	Separation Test (Lunar Env-Hybrid) P00, R33, P27, P00, P52, P00, R47, P47, P20, R31	Dion/Pickford Batra/Covelli
L4.2	Return to Earth Abort (Lunar Env-Digital) P00, R04, P30, P52, R47, P40	Dion/Pickford Bernikowich/Millard
L4.3	Descent Orbit Injection (Lunar Env-Hybrid) P00, P52, P30, R47, P40, R30, P25.	Pickford/Pickford Eyles/Covelli
L4.4	Powered Descent and Coast (Lunar Env-Digital) P00, R05, P20, R47, P63, R51, P70, P40, R31	Pu/Pickford Bernikowich/Millard
L4.5	Powered Descent (Lunar Env-Hybrid) P00, P63, P64, P65, P67, P66, P67, P68, P12, P57	Pu/Pickford Eyles/Covelli
L4.6	Abort from Touchdown (Hybrid) P00, P63, P64, P65, P68, P71, P25, R30, R31	Pu/Pickford Adler/Covelli Pu/Pickford
L4.7	Abort from Late Descent (Digital) P00, P63, P64, P70, P71, R30, R31	Berman/Millard Pickford/Pickford Millard/Millard
L4.8	Lunar Surface Navigation (Digital) P00, P57, P21, P22, R31, P00, R05	Pickford/Pickford Moore/Millard
L4.9	Lunar Surface Navigation (Digital) P00, P57, P76, P22, P00	
L4.10	Lunar Launch (Digital) P00, P57, P21, P12, R47, R30, R31, P00	Pickford/Pickford Berman/Millard
L4.11	CSI-CDH with IMU Realign and Plane Change (Lunar Env-Digital) P00, R47, P20, R31, P32, R36, P42, R30, R36, P30, P41, P52, P41, P52, P33, R36, P42, R31, P00.	Kornreich/Pickford White/Volante
L4.12	CDH-TPI Sequence (Lunar Env-Digital) P00, P20, R31, P33, R36, P42, R30, P20, P34, R36, P42, R31, P00	Kornreich/Pickford White/Volante
L4.13	TPI-TPM Sequence (Lunar Env-Digital) P00, P20, R31, P34, R36, P42, R31, P20, P35, R36, P41, R30, P00	Kornreich/Pickford White/Volante

LUMINARY LEVEL 4 TEST DESCRIPTION & PERSONNEL ASSIGNMENTS

TASK	DESCRIPTION & SEQUENCE	RESPONSIBLE ENGINEER
L4.14	SOI-SOM Sequence (Lunar Env-Digital)	P00, P20, R31, P38 (Mode 1), P42,R30, P20, P39, P41, R31, P00, R63	Templeman, Carroll/ Pickford Gauntt/Volante
L4.15	SOI-SOM-SOR Sequence (Lunar Env-Digital)	P00, P20, P38 (Mode 1), P40, P20, P39, P41, P20, P38 (Mode 2), P40	Templeman, Carroll/ Pickford Griggs/Volante
L4.16	CSM Active CSI-CDH Sequence (Lunar-Digital)	P00, P25, P72, P76, P73,P76, R31, P21	Kornreich/Pickford Volante/Volante
L4.17	CSM Active CDH-TPI Sequence (Lunar-Digital)	P00, P25, P73, P76, P74, R36, P76, P00	Kornreich/Pickford Connor/Volante
L4.18	CSM Active TPI-TPM Sequence (Lunar-Digital)	P00, P25, P74, R36, P76, P75, P76, P00, R31	Kornreich/Pickford Connor/Volante
L4.19	CSM Active SOI-SOM Sequence (Lunar-Digital)	P00, P20, P78 (Mode 1), P76, P20, P79	Templeman, Carroll/ Pickford Gauntt/Volante
L4.20	CSM Active SOI-SOM-SOR Sequence (Lunar-Digital)	P00, P25, P78 (Mode 1), P76, P79, P76, P78 (Mode 2), P76, P21	Templeman, Carroll/ Pickford Griggs/Volante
L4.21	CSM Docked (Cislunar-Digital)	P00, R05, P27, P31, P40	Dion/Pickford Fisher/Millard
L4.22	CSM Docked - IMU Align (Lunar Orbit-Digital)	P00, IMU OFF, P06, LGC ON, IMU ON, P51, P00, R05	NA to 23A Fisher/Millard
L4.23	SOR with IMU OFF (Earth Orbit-Hybrid)	P00, IMU OFF, P38, R36, IMU ON, P51, P41, R31, P00, R63	Templeman, Carroll/ Pickford Covelli/Covelli
L4.24	SOM with IMU OFF (Earth Orbit-Hybrid)	P00, P39, P52, P42, R31, P00, R63, R05	Templeman, Carroll/ Pickford Covelli/Covelli
L4.25	External Delta V with CSM Update (Lunar-Hybrid)	P00, P20, P30, P00, R62, P42, R30, P20, R31, P00	Dion/Pickford Braunhardt/Covelli
L4.26	External Delta V with Manual Acquire (Lunar-Digital)	P00, P76, P20, R23, P30, P00, R62, P41, R30, P20, R31	Dion/Pickford Fagin/Volante

LUMINARY LEVEL 4 TEST DESCRIPTION & PERSONNEL ASSIGNMENTS

TASK	DESCRIPTION & SEQUENCE		RESPONSIBLE ENGINEER
L4.27	CSM Active CSI with RR Search (Lunar-Hybrid)	P00, P25, P76, P20, R24, P00, P27, P20, R24, P72, R36, P76, P20.	Kornreich/Pickford Hatch/Covelli
L4.28	TPI-TPM Sequence (Earth-Hybrid)	P00, P20, P34, P42, P20, P35, P41, R30, P21	Kornreich/Pickford Wiggins/Covelli.
L4.29	Lunar Surface Navigation (Digital)	P00, P21, P22 (Option 2), P21, R30, P22 (Option 1), R31	Pickford/Pickford Dunbar/Volante.
L4.30	Lunar Surface Navigation with RR Search (Digital)	P00, P76, P22 (Option 1), R24, P21	Pickford/Pickford Dunbar/Volante

LUMINARY LEVEL 4 STATUS

Task	Engineering Verification & run initialization data			Initial Input Prepared*			Test Sequence Run Completely Through			New LGC Time-Line to 23A		
	Req.	Pred.	Actual	Req.	Pred.	Actual	Req.	Pred.	Actual	Req.	Pred.	Actual
L4.1	6/24	8/16	8/21	7/1	8/23	8/23	7/22	9/20	9/23	7/29	10/8	10/11 / 9/23
L4.2	6/28	7/15	7/26	7/5	8/16	8/23	7/12	9/6	9/6	7/19	9/20	9/23
L4.3	6/24	7/15	7/12	7/8	7/22	7/22	7/29	8/1	8/6	8/5	9/6	9/9
L4.4	6/28	8/16	8/20	7/5	9/13	9/13	7/19	10/9	10/9	7/26	10/11	10/14 / 10/9
L4.5	6/24	8/16	8/20	7/1	8/23	8/24	7/22	8/30	8/30	7/29	10/9	10/9
L4.6	7/30	8/30	8/29	8/6	9/6	9/9	8/15	9/24 / 10/24	10/1	8/22	10/11	10/11
L4.7	6/24	8/30	8/30	7/1	9/11	9/13	7/12	9/6		7/19	10/28	
L4.8	6/24	7/12	7/12	7/1	7/19	7/19	7/15	9/11	9/5	7/22	9/13	9/23
L4.9	6/28	7/12	7/12	7/5	7/19	7/19	7/19	8/16	9/17	7/26	9/13	9/24
L4.10	6/24	6/28	7/9	7/1	8/9	8/7	7/12	9/27	8/9	7/19	10/9	10/15
L4.11	6/28	8/16	9/23	7/5	9/23	9/23	7/17	9/13	9/26	7/24	10/1	10/7
L4.12	6/28	7/15	7/11	7/5	8/9	8/2	7/17	9/13	9/17	7/24	9/25	10/7
L4.13	6/28	7/15	7/11	7/5	8/9	8/9	7/17	8/30	9/17	7/24	9/25	10/7
L4.14	7/15	7/31	8/12	7/22	8/2	8/12	8/5	9/13	8/30	8/12	10/8	10/8
L4.15	7/15	7/31	8/8	7/22	8/2	8/8	8/5	9/13	9/18	8/12	10/8	10/7
L4.16	7/15	8/14	8/19	7/22	8/16	8/21	7/30	9/13	9/18	8/5	9/27	10/1
L4.17	6/28	7/15	8/8	7/5	9/6	9/6	7/15	9/6	9/17	7/22	9/24	9/30
L4.18	7/15	7/15	8/8	8/1	8/9	8/9	8/15	8/30	9/6	8/22	9/24	9/30
L4.19	7/15	7/31	8/5	7/22	8/2	8/5	8/5		8/28	8/12	10/8	10/8
L4.20	7/15	7/31	9/25	7/22	8/2	10/2	8/5		10/2	8/12	10/8	10/7
L4.21	6/28	8/13	8/16	7/5	8/20	8/23	7/15	8/27	8/30	7/22	9/10	9/10
L4.22	7/25	NA	NA	8/1	7/22	7/22	8/15	8/1	8/5	NA	NA	NA
L4.23	6/10	6/28	7/1	6/18	7/15	7/15	6/28	7/25	7/25	7/5	9/9	9/13
L4.24	6/10	6/28	7/1	6/28	7/15	7/15	7/8	7/25	7/25	7/15	9/13	9/18

* Hybrid script and initialization deck prepared or all digital simulation deck read by the computer.

LUMINARY. LEVEL 4 STATUS

Task	New Engineering Verification Data to match new time line			Finish Testing			Documentation Complete			Test Data Points Comp. verified.
	Req.	Pred.	Actual	Req.	Pred.	Actual	Req.	Pred.	Actual	
L4.1	8/5	10/24		9/23	10/30		10/7	11/6		
L4.2	7/26	10/8	9/23	8/23	10/25		9/6	11/6		
L4.3	8/12	9/13	9/10	9/23	10/30		10/7	11/11		
L4.4	8/2	10/23		8/23	10/30		9/6	11/11		
L4.5	8/5	10/16	10/16	9/23	10/30		10/7	11/11		
L4.6	8/29	10/15	10/22	9/10	10/30		9/24	21/11		
L4.7	7/26	10/31		8/26	11/4		9/9	11/10		
L4.8	7/29	9/27	9/24	8/26	10/25		9/9	11/6		
L4.9	8/2	9/27	9/26	8/30	10/25		9/13	11/6		
L4.10	7/26	10/23	10/10	8/26	10/30		9/9	11/11		
L4.11	7/31	10/10	10/1	9/13	10/25		9/27	11/6		
L4.12	7/31	10/10	9/26	9/13	10/25		9/27	11/6		
L4.13	7/31	10/10	10/11	9/13	10/30		9/27	11/6		
L4.14	8/16	10/11	10/11	9/9	10/25		9/23	11/6		
L4.15	8/16	10/11	9/17	9/9	10/25		9/23	11/6		
L4.16	8/12	10/2	10/1	9/13	10/11	10/11	9/27	11/6		
L4.17	7/26	9/27	10/3	8/9	10/11	10/11	8/23	10/25		
L4.18	8/29	9/27	10/3	9/19	10/11		10/3	10/25		
L4.19	8/16	10/11	10/11	9/9	10/25	10/16	9/23	11/6		
L4.20	8/16	10/11	10/11	8/9	10/18		9/23	11/1		
L4.21	7/26	9/13	9/17	9/9	10/25		8/23	11/6		
L4.22	NA	NA	NA	9/19	9/27	9/20	10/3	10/25		
L4.23	7/12	9/16	9/18	8/12	9/27	10/1	8/26	11/6		
L4.24	7/22	9/23	8/12	10/4	10/4	10/7	8/26	11/6		

LUMINARY LEVEL 4 STATUS

Task	Engineering Verification & run initialization data			Initial Input Prepared*			Test Sequence Run Completely Through			New LGC Time-Line to 23A		
	Req.	Pred.	Actual	Req.	Pred.	Actual	Req.	Pred.	Actual	Req.	Pred.	Actual
L4.25	7/25	8/16	8/16	8/1	8/30	8/30	8/12	9/25	9/30	8/19	9/27	10/3
L4.26	7/15	8/15	8/16	7/22	8/20	8/26	8/12	9/13	9/13	8/19	9/27	10/7
L4.27	7/25	8/13	8/16	8/1	8/20	8/20	8/12	9/27	10/3	8/19	10/2	10/7
L4.28	8/19	7/22	7/24	8/26	8/7	8/12	9/5	8/30	9/4	9/11	9/5	10/7
L4.29	7/15	8/30	8/28	7/22	9/6	8/30	8/2	9/13	9/16	8/9	9/25	9/26
L4.30	7/15	8/15	8/15	7/22	8/30	8/30	8/2	9/13	9/16	8/9	9/25	9/25

* Hybrid script and initialization deck prepared or all digital simulation deck read by the computer.

LUMINARY LEVEL 4 STATUS

Task	New Engineering Verification Data to match new time line			Finish Testing			Documentation Complete			Test Data Points Comp. verified.
	Req.	Pred.	Actual	Req.	Pred.	Actual	Req.	Pred.	Actual	
L4.25	8/23	10/2	10/4	9/6	10/11	10/15	9/20	11/1		
L4.26	8/23	10/10	10/8	9/6	10/18	10/18	9/20	11/1		
L4.27	8/23	10/10	10/10	9/6	10/18	10/22	9/20	11/1		
L4.28	9/16	9/13	10/9	9/30	10/17	10/17	10/7	10/31		
L4.29	8/16	9/27	9/30	9/6	10/11	10/10	9/20	10/25		
L4.30	8/16	9/27	9/26	9/6	10/11	10/10	9/20	20/25		